REMARKS

Claims 9, 11-13, 37 and 40-44 are pending in the application. Claims 9, 11, 13,37 and 41-44 have been amended. Reconsideration of this application is respectfully requested.

The Office Action rejects claims 9, 11-13 and 37 under 35 U.S.C 103(a) as unpatentable over U.S. Patent No. 6,665,036 to Oh et al., hereafter Oh, in view of U.S. Patent No. 6,111,627 to Kim et al., hereafter Kim, U.S. Patent No. 5,995,186 to Hiroshi, hereafter Hiroshi, and U.S. Patent No. 6,061,114 to Callegari et al., hereafter Callegari.

This rejection is respectfully traversed. Although it is believed that the Examiner's interpretation of the claims before amendment is erroneous, the interpretation is moot as the claims have been amended by replacing "particle beam treatment" with "ion beam bombardment". Support for this amendment is in the specification at least at page 10, lines 4-14, page 13, lines19-29, page 14, lines 18-20, page 15, lines 1-26, page 117, lines 11-21, and page 17, lines 13-21.

The Examiner admits that the combination of Oh, Kim and Hiroshi lacks the following recital that is recited in amended independent claims 9 and 37:

> "wherein each of said first dry deposited layer and said second dry deposited layer is divided into a plurality of pixels each having a boundary and at least two domains; wherein said domains are aligned by a method selected from the group consisting of: mechanical mask, photo-resist, UV treatment, and ridge and fringe field methods;
>
> wherein said dry deposited layers are exposed to at least a first ion beam bombardment and a second ion beam bombardment to selectively align said domains in first and second directions, respectively;
>
> wherein a direction of said first ion beam bombardment with

respect to said dry deposited layers is different than a direction of said second ion beam bombardment with respect to said dry deposited layer;

wherein said multi-domain, liquid-crystal display is operable in the in-plane switching mode".

The Examiner contends that Calligari discloses this recital. In particular, the Examiner contends that Calligari discloses a mechanical mask 966 that serves as a disclosure of:

"wherein said domains are aligned by a method selected from the group consisting of: mechanical mask, photo-resist, UV treatment, and ridge and fringe field methods".

This contention is erroneous. The Examiner notes that "each of the multi-domain, dry deposited layers is obtained by a mechanical mask 966". Calligari's mask 966 is described at column 6, lines 46-48 as:

"Atomic beam-device 948 may further include a mask 966 covering the surrounding of substrate 920."

Calligari's mask 966 covers only the surrounding of substrate 920 and not any part of the alignment layers (e.g., layers 706 and 708 of Fig. 7). Thus, Calligari's mask 966 does not play any role in a method of aligning domains of dry deposited layers 706 and 708. Therefore, Calligari lacks domains of the dry deposited layers that are aligned by a mechanical mask method.

The Examiner's further contention that the language before amendment of independent claims 9 and 37 is disclosed by Calligari's beam using the same ion for multiple treatments is moot. As noted above, this contention is no longer relevant to the amended language, which recites that "said dry deposited layers are exposed to at least a first ion beam bombardment and a second ion beam

bombardment to selectively align said domains in first and second directions, respectively". Calligari discloses only a single ion beam bombardment for alignment in a single direction and, therefore, lacks this recital contained in amended independent claims 9 and 37.

The Office Action provides no motivation for one skilled in the art combine Oh with Kim, Hiroshi and Callegari. In fact this suggested combination is improperly based on the hindsight of Applicants' disclosure., Such hindsight reconstruction of the art cannot be the basis of a rejection under 35 U.S.C. 103. The prior art itself must suggest that modification or provide the reason or motivation for making such modification. In re Laskowski, 871 F.2d 115, 117, 10 USPQ 2d 1397, 1398-1399 (CAFC, 1989). "The invention must be viewed not after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the time the invention was made." Sensonics Inc. v. Aerosonic Corp. 38 USPQ 2d 1551, 1554 (CAFC, 1996), citing Interconnect Planning Corp. v. Feil, 774 F. 2d 1132, 1138, 227 USPQ 543, 547 (CAFC, 1985).

For the reason set forth above, it is submitted that the rejection of claims 9, 11-13 and 37 under 35 U.S.C. 103(a) is obviated by the amendment and should be withdrawn.

The Office Action rejects claims 9, 11-13, 37, 41 and 43 under 35 U.S.C 103(a) as unpatentable over Oh, in view of Kim, Hiroshi, Callegari and Japanese Patent Publication No. 08-101390 to Masaaki et al., hereafter Masaaki.

As noted above, amended independent claims 9 and 37 are unobvious in view of the combination of Oh, Kim, Horishi and Callegari. The Examiner contends that Masaaki supplies the deficiency of the combination of Oh, Kim, Horishi and Callegari. The Examiner has supplied an English translation of only the abstract of Masaaki. Based on this abstract, Masaaki does not supply the

deficiency of the combination of Oh, Kim, Horishi and Callegari. Masaaki describes regions of the two substrates that face one another and have different orienting directions. This information is inadequate for the rejection.

If the Examiner maintains the rejection, it is respectfully requested that an English translation of Masaaki be supplied to Applicants. This request was previously made in the Amendment filed on March 7, 2008, but was ignored by the Examiner in the final Office Action.

The Office Action provides no motivation for one skilled in the art combine Oh with Kim, Hiroshi, Callegari and Masaaki. In fact, this suggested combination is improperly based on the hindsight of Applicants' disclosure. Such hindsight reconstruction of the art cannot be the basis of a rejection under 35 U.S.C. 103. The prior art itself must suggest that modification or provide the reason or motivation for making such modification. In re Laskowski, 871 F.2d 115, 117, 10 USPQ 2d 1397, 1398-1399 (CAFC, 1989). "The invention must be viewed not after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the time the invention was made." Sensonics Inc. v. Aerosonic Corp. 38 USPQ 2d 1551, 1554 (CAFC, 1996), citing Interconnect Planning Corp. v. Feil, 774 F. 2d 1132, 1138, 227 USPQ 543, 547 (CAFC, 1985).

For the reason set forth above, it is submitted that the rejection of claims 9, 11-13, 37, 41 and 43 under 35 U.S.C. 103(a) is obviated by the amendment and should be withdrawn.

The Office Action rejects claims 40-44 under 35 U.S.C 103(a) as unpatentable over Oh, in view of Kim, Hiroshi and Callegari as applied to claims 9, 11-3, 37 and 40 and further in view of U.S. Patent No. 6,124,914 to Chaudhari et al., hereafter Chaudhari.

This rejection is obviated by the amendment to independent claims 9 and 37 from which claims 40-44 depend. As noted in the discussion of amended independent claims 9 and 37, the combination of Oh, Kim, Hiroshi and Callegari lacks the above quoted passage of these independent claims. Chaudhari, which was cited for a different reason, does not supply this deficiency.

For the reason set forth above, it is submitted that the rejection of claims 40-44 under 35 U.S.C. 103(a) is obviated by the amendment and should be withdrawn.

It is respectfully requested for the reasons set forth above that the rejections under 35 U.S.C. 103(a) be withdrawn, that claims 9, 11-13, 37 and 40-44 be allowed and that this application be passed to issue.

For the reasons set forth above, it is submitted that this amendment places the application in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and passed to issue. If this amendment is deemed to not place the application in condition for allowance, it is respectfully requested that it be entered for the purpose of appeal.

Respectfully Submitted,

Date: 8/4/08

Paul D. Greeley
Reg. No. 31,019
Attorney for Applicants
Ohlandt, Greeley, Ruggiero & Perle, L.L.P.
One Landmark Square, 10th Floor
Stamford, CT 06901-2682
(203) 327-4500